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A USEFUL DIFFERENTIAL STAIN FOR INSECT INTERNAL ORGANS

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As an aid to those who must make examinations of internal organs of insects a most satisfactory staining technic has been found. This method is sometimes used by microtechnicians for staining microtome sections, but it has not been adapted to gross dissections, so far as the writer can find. The material is Oppel's polychromatic stain and is made up as follows:

Solution A.	Picric acid, saturated aqueous solution	50 cc.
	Indigo carmine, " " "	50 cc.
Solution B.	Picric acid, saturated aqueous solution	50 cc.
	Acid fuchsin, " " "	50 cc.

The technic is simple and consists of the following steps:

1. Open a specimen and pin it out on a piece of sheet cork that has been embedded in paraffin in a shallow pan. The top of a 6-ounce salve can is satisfactory.

2. Stain 1/2 minute with Solution A.

3. Rinse with water and pour off the excess.

4. Stain 1/2 minute with solution B.

5. Rinse with water.

6. Examine under water.

This stain produces a very beautiful combination of colors, the various organs taking different shadings. The penetration is limited and the stains are water-soluble. Restaining is necessary as fading takes place or as new tissues are exposed. In this stain the picric acid acts as a preservative, and observations may be continued for as long as a week if drying is prevented.

